

P a t e n t   C l a i m s

- 5            1. Method of drying a medium for producing a porous matrix from a solution, a paste, an extract, a granulated material or such, **CHARACTERIZED IN** feeding a liquid inert agent into a vessel (5) at controlled pressure and amount through a valve (7), transferring the pressurized liquid inert agent to a  
10 mixing vessel (4), said mixing vessel (4) also receiving the solution, such as paste, extract or granulated material, through an inlet valve (10), adjusting the pressure and temperature inside the mixing vessel (4) to desired levels by a release valve (6), upon complete mixing of the inert agent with the solution,  
15 the mixture is expanded into a porous matrix and injected into a drying circuit through a drying chamber (3), the matrix thereby being kept suspended in the drying chamber by the flowing drying medium, supplied by the blower 2, the matrix moisture being removed from the mixture through a heat exchanger coil comprising  
20 a first heat exchanger (11) where the water vapour is condensed and removed from the circuit and finally the drying medium is adjusted to the desired inlet condition in a heat exchanger (1) before the drying medium flows through the matrix and the process is repeated.
- 25            2. Apparatus adapted for drying a medium for producing a porous matrix from a solution, a paste, an extract, a granulated material or such, **CHARACTERIZED IN** the apparatus comprising a valve (7) being connected with a vessel (5) for feeding a liquified inert agent into the vessel (5) at controlled  
30 pressure and rate, the valve (7) thereby allowing dosing of the agent, a mixing vessel (4) being connected with the vessel (5) adapted to receive pressurized liquid inert agent as well as a solution such as a paste, an extract or a granulated material, through an inlet valve (10), a release valve (6) thereby  
35 controlling the pressure and the temperature inside the mixing vessel (4), an agitator (9) inside the mixing vessel (4) thereby ensuring complete mixing of the agent with the solution, a drying chamber (3) being connected with the mixing vessel (4) to receive the mixture as a porous matrix which thereby is injected into a

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drying circuit through the drying chamber (3), and a first heat exchanger (10) being connected with the circuit for condensing and removing the water vapour from the circuit, the drying medium thereafter being adjusted to the inlet condition of the drying  
5 chamber (3) by a second heat exchanger (1).

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